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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/698,134

10/31/2003

Raymond M. Genick II

0275M-000651

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07/20/2006

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EXAMINER

MCCREARY, LEONARD

ART UNIT

PAPER NUMBER

3616

DATE MAILED: 07/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/698,134		GENICK, RAYMOND M.	
	Examiner		Art Unit	
	Leonard J. McCreary, Jr.		3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/28/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc. The phrase "is disclosed" should be deleted.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "The cam bolt assembly" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claims 1 and 15 recite the limitation "first cam plate" in line 4 and line 6, respectively. There is insufficient antecedent basis for this limitation in the claim.

Claims 1 and 15 recites the limitation "second cam plate" in line 5 and line 7, respectively. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 6,669,421 to Hofschneider in view of U.S. 4,650,208 to Mason, and further in view of US 5,580,201 to Brilmyer. Hofschneider discloses a Connecting Element with Eccentric Disks comprising:

- a threaded fastener 1 defining a pair of longitudinal channels 18, 20 Figures 1, 2
- a non-threaded portion 10, 12 of the fastener 1
- a first cam plate 8 coupled to the non-threaded portion 10 of the threaded fastener 1
- a second cam plate 22 Figure 3 defining an aperture mated to the pair of longitudinal channels 18, 20

Hofschneider does not teach that either of the cam plates includes an arcuate slot.

Mason teaches the use of

- a cam plate with an arcuate slot in conjunction with an automobile suspension, the slot facilitating alignment adjustment (col 2, line 65 – col 3, line 2.)

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify Hofschneider in view of the teachings of Mason to incorporate one or more slotted cams, so as to facilitate alignment (claims 1, 2, 15, 16.)

Hofschneider does not teach the first cam plate 8 is mated to the threaded fastener 10 using a knurled portion. Brilmyer teaches:

- a threaded faster with a knurl portion 48 configured to mate with the first cam plate (claims 1, 4, 15, 18.)

It would have been obvious to one of ordinary skill in the art to modify the cam bolt assembly of Hofschneider in view of the teachings of Brilmyer to accept and retain a cam using an interference fit of a knurled portion of the fastener since this was well-known manufacturing process at the time of invention, and so as to provide a secure connection.

Hofschneider teaches a cam bolt assembly with a T-shaped cross section 1
Figure 2 (claims 3, 17.)

Hofschneider teaches a longitudinal channel defining a pair of bearing surfaces
Figure 2 (claims 5, 19.)

Hofscheider teaches longitudinal channels 16, 18 are defined through fastener 1 threads 14 into the fastener core Figure 2 (claim 12.)

Hofscheider teaches a fastener comprising a shoulder portion 10 (claim 13.)

It would have been an obvious design choice to one skilled in the art at the time of invention that a cam bolt assembly used in such a suspension application should be capable of withstanding a torque of 150N-m in order to avoid undue component deflection or failure (claim 6.)

It would have been an obvious design choice to one skilled in the art at the time of invention to manufacture a cam bolt assembly to the dimensions set forth in claims 7-11 in order to accommodate specific suspension structure and as utilizing such dimensions is within the level of skill of one in the art.

It would have been an obvious design choice to one skilled in the art at the time of invention to use a threaded fastener within the strength class of 10.9 or better in order to increase the strength of the assembly without increasing the physical size or weight of the assembly (claims 14, 20.)

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hofschneider in view of U.S. 4,650,208 to Mason, and further in view of US 5,580,201 to Brilmyer as applied to claim 15 above, and further in view of U.S. 6,113,299 to Reichelt. Hofschneider does not teach the longitudinal channels may be partially defined by the non-threaded portion 12, 10 of the fastener 1. Reichelt teaches a threaded fastener with longitudinal channels that are

- partially defined by the non-threaded portion of the fastener.

It would have been obvious to one of ordinary skill in the art at the time of invention to extend the longitudinal channels of Hofschneider into the non-threaded portion of the fastener in view of the teachings of Reichelt in order to maintain a greater cross sectional area in the region of the cam and thus increase the strength of the fastener (claim 21.)

Response to Arguments

1. Applicant's arguments filed 26 April 2006 have been fully considered but they are not persuasive.
2. Re claims 1, 4, 15, and 18, applicant argues the Examiner's conclusion of obviousness is based upon improper hindsight reasoning. It must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill at the time of invention, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. *In re McLaughlin*, 448 F.2d 1892; 170 USPQ 209 (CCPA 1971.) Applicant argues "Brilmyer teaches away from the addition of the knurl portion." However, as set forth in the rejection, the examiner is relying on knurled portion 48 as disclosed in the prior art Fig. 4 of Brilmyer. Accordingly, although there may be disadvantages to using a knurled portion, there are still advantages, thus one of ordinary skill in the art would not be

precluded from using the teachings of Fig. 4 to modify the bolt of Hofscheider so as to provide a secure connection.

3. Re claim 6, applicant argues "it is not necessarily obvious to one skilled in the art that the threaded fastener with two channels could meet torque requirements of 150N-m, particularly with knurling." The Examiner's initial rejection is upheld, and further, it has been held that the recitation that an element is "capable of" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hitchison*, 69 USPQ 138.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

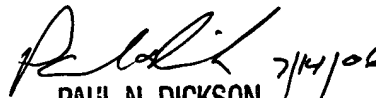
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard J. McCreary, Jr. whose telephone number is 571-272-8766. The examiner can normally be reached on 0700-1700 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Leonard J. McCreary, Jr.
Examiner
Art Unit 3616



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